

REMARKS

Reconsideration and allowance of this application are respectfully requested. Claims 1-7, 14, and 26 are cancelled. Claims 8-13, 15-25, and 27-31 remain in this application and, as amended herein, are submitted for the Examiner's reconsideration.

Claims 8, 18, 20, and 30 have been amended solely to have the claims better conform to the requirements of U.S. practice. None of these amendments is intended to narrow the scope of any of these claims, and no new matter has been added by these amendments.

In the Office Action, claims 8-31 were rejected under 35 U.S.C. § 102(e) as being anticipated by Walker (U.S. Patent No. 7,342,973). Claims 14 and 26 are cancelled. Applicants submit that the remaining claims are patentably distinguishable over the relied on sections of Walker.

As an example, independent claim 8 recites:

(a) selecting a highest frequency band from a plurality of frequency bands;

...[and]

(d) when the selected frequency band (i) does not include an unused channel, or (ii) does not include an unused channel in which no disturbing wave is present, or (iii) includes the unused channel in which no disturbing wave is present but there is no transmission rate associated with the selected frequency band at which the received field strength value exceeds the threshold value, selecting the next highest frequency band from the plurality of frequency bands and repeating steps (b) through (d) using the next highest frequency band as the selected frequency band[.]

(Emphasis added.) The relied on sections of Walker neither disclose nor suggest selecting a highest frequency band from a plurality of frequency bands, and the relied on sections of Walker neither disclose nor suggest selecting a next highest frequency band from a plurality of frequency bands.

Rather, the relied on sections of Walker simply describe determining whether the data throughput rate provided by a currently used set of bands can be maintained by removing from that set any bands which are impaired by interference and then replacing those bands with bands from an available set. (See col.8 ll.29-41.) Such relied on sections of the reference are not at all concerned with whether the selected bands have a highest frequency from the available set of bands.

The relied on sections of Walker also describe that if there are no available unused bands so that the current throughput rate cannot be maintained, a determination is made as to whether a reduced throughput is possible, such as by removing the impaired bands to reduce the number of bands used for communicating data. (See col.8 ll.52-57.) Such relied on sections are likewise not at all concerned with selecting a next highest frequency band when a reduced throughput is possible.

It follows, for at least the above reasons, that the relied on sections of Walker do not disclose or suggest the combination defined in claim 8 and therefore do not anticipate the claim.

Independent claim 20 calls for features similar to those set out in the above excerpt of claim 8. Each of these claims is therefore patentably distinguishable over the relied on sections of Walker for at least the reasons set out above regarding claim 8.

Claims 9-12 depend from claim 8, and claims 21-24 depend from claim 20. Therefore, each of these claims is distinguishable over the relied on sections of Walker at least for the same reasons as its parent claim.

As amended herein, independent claim 13 recites:

(e) when none of the plurality of frequency bands includes an unused channel or when none of the plurality of frequency bands includes an unused channel in which no disturbing wave is present,

continuing communication with the second wireless communication device for a predetermined time period using the given one of the plurality of frequency bands as the communication channel.

(Emphasis added.) The relied on sections of Walker neither disclose nor suggest that when none of a plurality of frequency bands includes an unused channel, continuing communication with a wireless communication device for a predetermined time period using the given frequency band as the communication channel.

Moreover, the relied on sections of Walker neither disclose nor suggest that when none of a plurality of frequency bands includes an unused channel in which no disturbing wave is present, continuing communication with a wireless communication device for a predetermined time period using the given frequency band as the communication channel.

Rather, the relied on sections of Walker describe that if the current throughput cannot be sustained, a determination is made as to whether the communication link could be maintained with a reduced throughput such as by removing the bands containing interference, and if it is determined that the communication link cannot be maintained with reduced throughput, the communication process is terminated and an attempt to reestablish a communication link is then carried out after a delay. (See col.8 ll.52-57 and col.9 ll.6-11.) The relied on sections of the reference are not at all concerned with continuing communication for a predetermined time period using the current band set when there is no unused band or when there is no unused band that is not impaired by interference.

It follows, for at least the above reasons, that the relied on sections of Walker do not disclose or suggest the combination defined in claim 13 and therefore do not anticipate the claim.

Independent claim 25 has been amended to call for features similar to those set out in the above excerpt of

claim 13. Each of these claims is therefore patentably distinguishable over the relied on sections of Walker for at least the reasons set out above regarding claim 13.

Claims 15-16 depend from claim 13, and claims 27-28 depend from claim 25. Therefore, each of these claims is distinguishable over the relied on sections of Walker at least for the same reasons as its parent claim.

Independent claim 17 recites:

periodically determining, during communication with the second wireless communication device at a particular one of a plurality of transmission rates associated with a given frequency band, whether the plurality of transmission rates includes at least one transmission rate that is higher than the particular transmission rate;

...

when the received field strength value at the immediately higher one of the plurality of transmission rates exceeds the threshold value,

(i) determining whether a next higher one of the plurality of transmission rates exists, [.]

(Emphasis added.)

Though Walker describes that a determination is made as to whether the communication link would benefit from increased throughput (see col.9 ll.12-24), such sections of Walker are not prior art. Though Walker claims priority from U.S. Provisional Application Nos. 60/359,044, 60/359,045, 60/359,046, 60/359,064, 60/359,094, 60/359,095, and 60/359,147, each filed on February 20, 2002, and U.S. Provisional Application No. 60/326,093, filed on September 26, 2001, none of these provisional applications disclose this subject matter. Hence, the prior art date of the sections of Walker that disclose this subject matter is either February 20, 2003 (the filing date of the application from which Walker issued) or September 26, 2002 (the filing dates of U.S. Application Nos. 10/255,111 and 10/255,103 of which Walker is a continuation-in-part).

By contrast, the present application is a national stage application under 35 U.S.C. § 371 of International Application No. PCT/JP03/05107, filed April 22, 2003, which claims priority from Japanese Application No. JP 2002-120518, filed April 23, 2002. Therefore, the priority data of the present application precedes the prior art date of the relied on section of Walker.

Independent claim 17 also recites:

when the plurality of transmission rates includes the at least one transmission rate higher than the particular transmission rate, determining whether a received field strength value at one of the plurality of transmission rates that is immediately higher than the particular one of a plurality of transmission rates exceeds a threshold value;

when the plurality of transmission rates does not include the at least one transmission rate higher than the particular transmission rate or when the received field strength value at the immediately higher one of the plurality of transmission rates does not exceed the threshold value, continuing the communication with the second wireless communication device at the particular transmission rate; and

when the received field strength value at the immediately higher one of the plurality of transmission rates exceeds the threshold value,

(i) determining whether a next higher one of the plurality of transmission rates exists,

(ii) when the next higher one of the plurality of transmission rates exists, determining whether the received field strength value at the next higher one of the plurality of transmission rates exceeds the threshold value,

(iii) when the received field strength value at the next higher one of the plurality of transmission rates does not exceed the threshold value, continuing communication with the second wireless communication device at an immediately lower one of the plurality of transmission rates,

(iv) when the received field strength value at the next higher one of the plurality of transmission rates exceeds the threshold value, repeating steps (i) through (iv) until the next higher one of the plurality of transmission rates is a highest one of the plurality of transmission

rates.

(Emphasis added.) The relied on sections of Walker neither disclose nor suggest that when a received field strength value at a transmission rate higher than a particular transmission rate does not exceed a threshold value, continuing communication at the particular transmission rate. Further, the relied on sections of Walker neither disclose or suggest that when a received field strength at a transmission rate higher than a particular transmission rate exceeds a threshold value, a determination is made at a next higher transmission rate. Moreover, the relied on sections of Walker neither disclose nor suggest that when a received field strength value at the next higher transmission rate does not exceed a threshold value, continuing communication at the higher transmission rate (which is higher than the particular transmission rate). Additionally, the relied on sections of Walker neither disclose or suggest that when a received field strength at the next higher transmission rate exceeds a threshold value, a determination is made at a still higher transmission rate.

Rather, the relied on sections of the patent describe that detection of excess signal energy in a given sub-band indicates interference in that sub-band and requires removal of that sub-band to either maintain transmission at current throughput or to reduce throughput. (See col.9 11.55-60.) Namely, such relied on sections teach that an interfering signal is present when the signal energy exceeds a threshold value. The relied on sections of Walker do not teach or suggest attempting a higher throughput when the signal energy exceeds a threshold value (i.e., upon detection of excess signal energy) and do not teach or suggest continuing communication at a lower throughput when the signal energy does not exceed a threshold value (i.e., upon failure to detect excess signal energy).

It follows, for at least the above reasons, that the relied on sections of Walker do not disclose or suggest the combination defined in claim 17 and therefore do not anticipate the claim.

Independent claim 29 calls for features similar to those set out in the above excerpt of claim 17. Each of these claims is therefore patentably distinguishable over the relied on sections of Walker for at least the reasons set out above regarding claim 17.

Independent claim 18 recites:

when the received field strength value at the particular one of the plurality of transmission rates exceeds the threshold value, continuing the communication with the second wireless communication device at the particular one of the plurality of transmission rates;

when the received field strength value at the particular one of the plurality of transmission rates does not exceed the threshold value, determining whether the received field strength value at an immediately lower one of the plurality of transmission rates exceeds the threshold value;

when the received field strength value at the immediately lower one of the plurality of transmission rates exceeds the threshold value, continuing the communication with the second wireless communication device at the immediately lower one of the plurality of transmission rates; and

when the received field strength value at the immediately lower one of the plurality of transmission rates does not exceed the threshold value,

(i) determining whether a next lower one of the plurality of transmission rates exceeds the threshold value,

(ii) when the next lower one of the plurality of transmission rates exceeds the threshold value, continuing the communication with the second wireless communication device at the next lower one of the plurality of transmission rates,

(iii) when the next lower one of the plurality of transmission rates does not exceed the threshold value, repeating steps (i) through (iii) until steps (i) through (iii) are carried

out for a least one of the plurality of transmission rates or until the next lower one of the plurality of transmission rates is a lowest acceptable transmission rate, and ...

(Emphasis added.) For at least the reasons set out above regarding claim 17, the relied on sections of Walker neither disclose nor suggest that when a received field strength value at a particular transmission rate exceeds a threshold value, continuing communication at that transmission rate. Further, the relied on sections of Walker neither disclose nor suggest that when a received field strength value at a particular transmission rate does not exceed a threshold value, determining the same at an immediately lower (or next lower) transmission rate. Moreover, the relied on sections of Walker neither disclose nor suggest that when a received field strength value at the a lower transmission rate exceeds a threshold value, continuing communication at the immediately lower (or next lower) transmission rate (which is lower than the particular transmission rate).

It follows, for at least the above reasons, that the relied on sections of Walker do not disclose or suggest the combination defined in claim 18 and therefore do not anticipate the claim.

Independent claim 30 calls for features similar to those set out in the above excerpt of claim 18. Each of these claims is therefore patentably distinguishable over the relied on sections of Walker for at least the reasons set out above regarding claim 18.

Claim 19 depends from claim 18, and claim 31 depends from claim 30. Therefore, each of these claims is distinguishable over the relied on sections of Walker at least for the same reasons as its parent claim.

Accordingly, Applicants respectfully request the withdrawal of the rejections under 35 U.S.C. § 102(e).

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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